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AUTHOR Carpenter, C. R.; Froke, Marlowe
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ABSTRACT

A panel was formed for the purpose of evaluating those attributes of instructional film and instructional television programs which affect learning behavior. This is the fourth of a series of general, special, and varied reports of a project whose aim is to examine the "Conditions, Requirements, and Variables Affecting the Quality of Complex Learning Mediated by Instructional Materials." The panel found the exercise so far rewarding that they recommended that additional panels of target audiences, educational specialists, content specialists, production specialists, and media specialists should be set up as a system of evaluation for instructional television and film programs. The meetings are fully documented. (EM 007 926, EM 007 927, and EM 007 928 are related documents.) (GO)

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DESCRIPTION OF A PRACTICAL PROCEDURE
FOR ASSESSING
INSTRUCTIONAL FILM AND TELEVISION
PROGRAMS

EM 007 929

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DESCRIPTION OF A PRACTICAL PROCEDURE
FOR ASSESSING
INSTRUCTIONAL FILM AND TELEVISION
PROGRAMS

C. R. Carpenter: Project Director
Marlowe Froke: Chairman, Assessment Panel

The Pennsylvania State University
Department of Psychology
214 Burrowes Building
University Park
Pennsylvania 16802

814-865-2567

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Andrew Molnar: Project Coordinator

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PREFACE

This is the fourth of a series of general, special, and varied reports of the Project: Conditions, Requirements, and Variables Affecting the Quality of Complex Learning Mediated by Instructional Materials. This special report is, as its title indicates, the "Description of a Practical Procedure for Assessing Instructional Film and Television Programs."

Ideally, the quality or effectiveness of instructional materials is measured in terms of the degree to which they stimulate, arouse, shape, and investigate learned changes in human behavior. It has been argued in General Report Number I of this Project that a great many sets of different conditions affect learning and that the intrinsic or potential quality of the immediate stimulus materials, such as recordings on films or videotapes, represent important but narrow-band influences in learned behavioral changes. This line of argument holds, furthermore, that the general quality of such materials, even though accurately measured, cannot be expected to have very high correlations or close relations with affected learned behavior.

It is important, nevertheless, within the area of instructional materials production, selection, procurement, and use to have good judgmental evaluations of the stimulus materials, factors, and components which affect learning behavior. Furthermore, the practical procedures for assessing the factors of quality of instructional materials must be reasonably economical. Accordingly, however desirable it is to determine their effectiveness by actual tests of the extent or degree to which they, and they alone, influence learned behavior in the direction of instructional objectives, this costly and time-consuming procedure is simply not practical

under most present conditions of producing, selecting, and procuring film and television programs. Perhaps this approach will become practical when the nation has developed a system of applied theory of instruction and implemented its use with the necessary funds, trained people, and networks of production facilities superbly designed for the purpose of producing and assessing instructional materials of high quality.

Practices and procedures currently used for evaluating instructional television and film programs extensively use human judgments, both of individuals and judging panels. The judgmental schedule form is not new; it has been under occasional development for twenty years and, as this report shows, it needs further improvement. Program series for National Educational Television and for The National Center for School and College Television are selected and approved on the basis of the evidence from human judgments. In this, the assessment and evaluation procedures correspond more closely to those used in the fine arts than those used in the field of the sciences of learning. In reality, instructional program materials are often selected merely from written descriptions and from limited sample viewing rather than by means of systematic assessment with direct observations of special judging panels and adequate sampling of programs. Thus, the practical and the useful procedures should be accepted for development and improvement until the ideal operational evaluations can be achieved.

During the discussions at the twelve seminars conducted by this Project on the topic, Factors Affecting the Quality of Instructional Materials,* it became evident again and again that references needed to be made to

*General Report No. 1 of this Project

direct observations, analyses, and assessments of instructional units and programs. Accordingly, the Project staff undertook to develop and test once again the form which is described in this paper and which is intended to serve as a guide for judgments about the estimated effectiveness of instructional materials. The hope was, also, to identify the specific factors that contribute to the general characteristic of quality in programs already judged to be good or superior.

A small panel of media specialists was selected and given the responsibility for conducting the evaluation accordingly. It is noteworthy that these specialists who invested the time required to test, study, and report on the procedure found the task rewarding and well worth the effort. Use of the evaluation form has training values.

The judging of athletic performances and of exhibitions of art has been developed into human precision performances. Is it not possible to develop similar judgmental precision about the quality factors of instructional materials?

C. R. Carpenter
Project Director

University Park, Pennsylvania
August 12, 1968

PANEL: ASSESSING INSTRUCTIONAL
FILM AND TELEVISION
PROGRAMS

Panel Members

Marlowe Froke, Chairman; Director, Division of Broadcasting*

E. Arthur Hungerford, Associate Professor, Speech*

Donald Johnson, Associate Director, Division of Instructional Services*

Dennis Sherk, In-School Service Coordinator, Division of Broadcasting*

Steering Committee

C. R. Carpenter, Chairman; Research Professor, Psychology and Anthropology*

George A. Borden, Assistant Professor, Speech*

Samuel Dubin, Director, Planning Studies, Continuing Education*

Marlowe Froke, Director, Division of Broadcasting*

E. Arthur Hungerford, Associate Professor, Speech*

Donald Johnson, Associate Director, Division of Instructional Services*

Merrill E. Noble, Professor and Head, Psychology Department*

Stanley F. Paulson, Professor and Head, Speech Department*

Warren Seibert, Distinguished Visiting Professor, Educational Psychology*
(on leave - Head, Instructional Media Research Unit, Purdue University)

Dennis Sherk, In-School Services Coordinator, Division of Broadcasting*

William Rabinowitz, Professor and Head, Educational Psychology Department*

Wendell I. Smith, Head, Psychology Department, Bucknell University

*Members of The Pennsylvania State University faculty.

PROCEDURE

Since the development of high-quality educational programs is of great importance to this Project, the Steering Committee decided that a number of existing educational television and film programs considered to be exceptionally well produced should be studied in order to determine which elements in each contribute to the estimated high quality of the program. Two other tasks were undertaken: first, to test once again and make suggestions for the improvement of the form for evaluating film and television programs; second, to study the needs for developing related procedures for using the form in practical conditions of the selection, procurement, and production of instructional programs.

Nominations of such programs were collected from participants of the Project Harvest Seminars as well as from members of the Steering Committee.

Nominations included the following television programs:

CODE FOR CLASSIFICATION OF INSTRUCTIONAL TELEVISION PROGRAMS AND FILMS

<u>Age Level</u>	<u>Subject Area</u>	
1 Informal Education, Children	A Literature	J Current Events
2 Pre-school	B Science	K Health
3 Primary (1-3)	C Art	L Physical Education
4 Intermediate (4-6)	D Music	M General
5 Junior and senior high (7-12)	E Language	N Theatre Arts
6 College and university	F Math	
7 Adult - Instructional and Training	G History	
8 Adult - General	H Geography	
	I Driver Education	

INSTRUCTIONAL TELEVISION PROGRAM NOMINATIONS

<u>Name of Program</u>	<u>Produced by</u>	<u>Age Level</u>	<u>Subject Area</u>
Mister Roger's Neighborhood	WQED, Pittsburgh	1	M
Cover to Cover	WETA, Washington Jay Robbins	4	A
Pocketful of Fun	21" Classroom Boston	2	CD
Let's Investigate	" "	4	B
Children's Literature	University of Nebraska Dolores & Bob Dudley	3	A
Biology series	Dade County School System, Miami, Fla.	5	B
Meaning in Art	WPSX, Penn State	3	C
Roundabout	WETA, Washington	2	M
Stepping into Rhythm	WVIZ, Cleveland	3	D
All About You	21" Classroom	3	K
Tell Me a Story	WQED, Pittsburgh	3	A
You and Eye	KQED, San Francisco	4	C
Wordsmith	KQED, San Francisco	3	E
Meet the Arts	21" Classroom	3/4	C/D
Patterns in Arithmetic	University of Wisconsin	4	F
World of Change	21" Classroom	4	B
Americans All	KRMA, Denver	4	G
Geography for Grade 4	KRMA, Denver	4	G
Sportsmanlike Driving	South Carolina ETV	5	I
Franklin to Frost	University of Michigan	5	A
Parlons Francais	Heath de Rochemont	4	E

<u>Name of Program</u>	<u>Produced by</u>	<u>Age Level</u>	<u>Subject Area</u>
Meteorology 300	WPSX, Penn State	6	B
Sons and Daughters	WITF, Hershey	5	K
Places in the News	WNYE, New York	4	J
Secondary Developmental Reading	WQED, Pittsburgh	5	E
Pennsylvania History and Government	WITF, Hershey	5	G
Alive and About	WEDH, Hartford	4	B
American Historic Shrines	WNDT, New York	4	G
Health--Your Decision	WETA, Washington	5	K
Come Read to Me a Poem	WNYE, New York	4	A
Many Sounds of Music	WPSX, Penn State	5	D
Adapted Physical Education	WPSX, Penn State	7	L
American Civilization by its Interpreters	University of Texas	6	G

FILM NOMINATIONS

The Educational Film Library Association provided a list including the "Best Ten" educational films produced since 1959. These were selected by the membership of the Association. The following list also includes additional films which received a large number of votes:

Nominations included the following films:

<u>Name of Film</u>	<u>Producing Company</u>	<u>Distributing Agency</u>	<u>Age Level</u>	<u>Subject Area</u>
AN OCCURRENCE AT OWL CREEK BRIDGE	University of Southern California	University of Southern California	5,6,8	A,M,N
THE RED BALLOON	Albert Lamorisse	Brandon Films	1,2,3,4,5,6,8	N,C
SEARCH FOR ULYSSES	Carousel	Carousel Films, Inc.	1,5,6,8	A,G
UNIVERSE	National Film Board of Canada	McGraw-Hill	1,5,6	B,N
THE GOLDEN FISH	Columbia Picture Corporation	Brandon Films	1,3,4	A,C
DISCOVERING COLOR	Film Associates of California	Film Associates of California	3,4	C
RAINSHOWER	Dimension Films	Churchill Films	1,3,4,5	A,C
LOUVRE	National Broadcasting Company, TV	Encyclopedia Britannica Films	5,6,8	C,G
NIGHT AND FOG	Argus, Inc.	McGraw-Hill	6,8	N,G
PADDLE TO THE SEA	National Film Board of Canada	McGraw-Hill	3,4	A,H,M

<u>Name of Film</u>	<u>Producing Company</u>	<u>Distributing Agency</u>	<u>Age Level</u>	<u>Subject Area</u>
NEW YORK, NEW YORK	Francis Thompson	Campus only	4,5,6, 8	A,C,N
CITY OF GOLD	National Film Board of Canada	McGraw-Hill	5,6,8	A,G,N
PRINTS	ACI Productions	ACI Productions	4,5,6, 8	C
FISHING ON THE COAST OF JAPAN	International Film Foundation	International Film Foundation	4,5,6, 8	G,C,D,
SYMMETRY	Contemporary Films	McGraw-Hill	5,6,7, 8	B,C,F,N
PIGS	Churchill Films	Churchill Films	1,2,3, 4,5,8	C,A
HAILSTONES & HALIBUT BONES	Fine Arts Produc- tions	Sterling Educa- tional Films	1,2,3, 4,5,8	C,A
CHILDREN OF THE WAGON TRAIN	Young America Films	McGraw-Hill	4,5	G
SETTLING THE GREAT PLAINS	McGraw-Hill	McGraw-Hill	4,5	G
HUMAN REPRODUCTION	McGraw-Hill	McGraw-Hill	4,5	K,L
TRUE STORY OF THE CIVIL WAR	Camera Eye Pictures	McGraw-Hill	5,6,8	G,M
LEARNING DISCRIMINATIONS AND SKILLS	McGraw-Hill	McGraw-Hill	6,7	B
PHOEBE: STORY OF PREMARITAL PREGNANCY	National Film Board of Canada	McGraw-Hill	5,6,7	K,L

FINAL SELECTIONS OF TELEVISION AND FILM PRODUCTIONS

From the nominated lists of titles of the instructional television and film programs, the following subjects were selected for study and evaluation:

TELEVISION

<u>Series</u>	<u>Program</u>
All About You	Getting the Message
World of Change	Motion
Meaning in Art	Do You Recognize?
Cover to Cover	Wind in the Willows
Patterns in Arithmetic	Arithmetic I
Children's Literature	Tobias

FILM

Pigs
Symmetry
True Story of the Civil War
Universe
Hailstones and Halibut Bones

The evaluation form or judgmental schedule that was used was first developed by the Penn State Instructional Film Research Program during the 1950's and has been modified many times in many ways since it was first developed. The latest form was being used by The National Center for School and College Television. This form was modified by the Project's Steering Committee and circulated to seminar participants and consultants for suggested modifications. The final form used for testing in the Project appears on page 30 of this Report.

METHOD OF ASSESSMENT

The Steering Committee named three faculty members of The Pennsylvania State University as a subcommittee for conducting the test evaluations. They were Marlowe Froke, Chairman, Director, Division of Broadcasting;* E. Arthur Hungerford, Associate Professor, Speech;* Dennis Sherk, In-School Service Coordinator.*

The following instructions were given to the subcommittee:

1. At each evaluation session, one or more members of the subcommittee should be present.
2. All three members of the viewing panel should use the same form and agree on each item. For each program viewed, there should be only one completed form.

The Steering Committee agreed to add Donald Johnson, Associate Director, Division of Instructional Services,* to the subcommittee and several other interested persons were invited to attend each of the evaluating sessions. They were Thurston Reeves, Director, Audio-Visual Services;* Daniel Smith, Executive Director, Allegheny Educational Broadcast Council; and Robert Dudley, Assistant Director, Division of Broadcasting.*

Evaluation sessions were held on May 27, 29, and 31, 1968. All subcommittee members and evaluators attended the first session only. Mr. Reeves was absent from the remaining two sessions.

At the first subcommittee meeting, it was decided that this would be the procedure for evaluation:

*The persons are members of The Pennsylvania State University faculty.

1. Identification of program.
2. Viewing of program.
3. Completion of the evaluation form by each evaluator.
4. Preparation of the composite evaluation form by evaluators based on their individual evaluations.

For purposes of interpretation, the results of the judgments were tabulated. Point values ranging from 4 to 0 were assigned to the five-point scale in questions 1 through 13, and 15 through 19. Question 14 was a two-point scale with values of 4 and 0 assigned. DNA--Does Not Apply--was not included in the scale; a separate tabulation was made of these responses.

Because of the broad range of applicability of the evaluation instrument to the specific television and film programs, no statistical significance other than as a means for general observations could be given to the tabulation.

TABULATION OF RESULTS OF EVALUATION

PROGRAM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total Ave.
Arithmetic I	$\frac{17}{0}$	$\frac{21}{0}$	$\frac{14}{1}$	$\frac{18}{0}$	$\frac{12}{1}$	$\frac{17}{0}$	$\frac{20}{0}$	$\frac{13}{0}$	$\frac{14}{0}$	$\frac{15}{0}$	$\frac{14}{0}$	$\frac{13}{0}$	$\frac{8}{0}$	$\frac{8}{0}$	$\frac{14}{1}$	$\frac{5}{3}$	$\frac{0}{0}$	$\frac{0}{0}$	$\frac{11}{0}$	$\frac{234}{6}$
	(T)																		1.8	39.0
Motion	$\frac{8}{0}$	$\frac{7}{0}$	$\frac{3}{0}$	$\frac{5}{0}$	$\frac{7}{0}$	$\frac{8}{0}$	$\frac{2}{0}$	$\frac{4}{0}$	$\frac{10}{0}$	$\frac{12}{0}$	$\frac{8}{0}$	$\frac{10}{0}$	$\frac{7}{0}$	$\frac{4}{0}$	$\frac{6}{0}$	$\frac{6}{0}$	$\frac{0}{0}$	$\frac{0}{0}$	$\frac{4}{0}$	$\frac{111}{0}$
	(6)																		1.6	18.5
Do You Recognize?	$\frac{22}{0}$	$\frac{23}{0}$	$\frac{16}{0}$	$\frac{22}{0}$	$\frac{20}{0}$	$\frac{20}{0}$	$\frac{21}{0}$	$\frac{24}{0}$	$\frac{24}{0}$	$\frac{20}{0}$	$\frac{18}{0}$	$\frac{21}{0}$	$\frac{17}{0}$	$\frac{24}{0}$	$\frac{21}{0}$	$\frac{12}{1}$	$\frac{8}{0}$	$\frac{0}{1}$	$\frac{22}{0}$	$\frac{355}{2}$
	(T)																		3.7	59.2
Wind in the Willows	$\frac{17}{0}$	$\frac{17}{0}$	$\frac{17}{0}$	$\frac{14}{1}$	$\frac{10}{1}$	$\frac{18}{0}$	$\frac{11}{2}$	$\frac{17}{0}$	$\frac{18}{0}$	$\frac{17}{0}$	$\frac{17}{0}$	$\frac{18}{0}$	$\frac{21}{0}$	$\frac{20}{0}$	$\frac{19}{0}$	$\frac{18}{0}$	$\frac{0}{0}$	$\frac{0}{0}$	$\frac{16}{0}$	$\frac{285}{4}$
	(6)																		2.7	47.5
Tobias	$\frac{22}{0}$	$\frac{24}{0}$	$\frac{22}{0}$	$\frac{22}{0}$	$\frac{11}{2}$	$\frac{23}{0}$	$\frac{18}{1}$	$\frac{23}{0}$	$\frac{20}{0}$	$\frac{13}{0}$	$\frac{23}{0}$	$\frac{23}{0}$	$\frac{26}{0}$	$\frac{28}{0}$	$\frac{25}{0}$	$\frac{17}{1}$	$\frac{0}{0}$	$\frac{0}{0}$	$\frac{22}{0}$	$\frac{362}{4}$
	(7)																		3.1	51.7
Getting the Message	$\frac{20}{0}$	$\frac{21}{0}$	$\frac{14}{0}$	$\frac{17}{0}$	$\frac{14}{0}$	$\frac{17}{0}$	$\frac{15}{0}$	$\frac{17}{0}$	$\frac{14}{0}$	$\frac{14}{0}$	$\frac{15}{0}$	$\frac{19}{0}$	$\frac{23}{0}$	$\frac{12}{0}$	$\frac{20}{0}$	$\frac{13}{0}$	$\frac{0}{0}$	$\frac{0}{0}$	$\frac{18}{0}$	$\frac{287}{0}$
	(T)																		3.0	47.8
Symmetry	$\frac{21}{0}$	$\frac{23}{0}$	$\frac{15}{0}$	$\frac{18}{1}$	$\frac{16}{2}$	$\frac{0^*}{7}$	$\frac{15}{0}$	$\frac{24}{0}$	$\frac{17}{2}$	$\frac{2^*}{6}$	$\frac{19}{1}$	$\frac{13}{3}$	$\frac{0^*}{7}$	$\frac{0^*}{7}$	$\frac{10}{4}$	$\frac{17}{1}$	$\frac{0}{0}$	$\frac{0}{1}$	$\frac{21}{0}$	$\frac{231}{42}$
	(7)																		3.0	33.0
Pigs	$\frac{20}{0}$	$\frac{23}{0}$	$\frac{21}{0}$	$\frac{21}{0}$	$\frac{9^*}{4}$	$\frac{0^*}{7}$	$\frac{15}{1}$	$\frac{25}{0}$	$\frac{22}{1}$	$\frac{9^*}{3}$	$\frac{19}{1}$	$\frac{17}{2}$	$\frac{0^*}{7}$	$\frac{0^*}{7}$	$\frac{4}{6}$	$\frac{18}{1}$	$\frac{0}{0}$	$\frac{0}{0}$	$\frac{23}{0}$	$\frac{246}{40}$
	(7)																		3.3	35.1
True Story	$\frac{19}{0}$	$\frac{15}{0}$	$\frac{16}{0}$	$\frac{17}{0}$	$\frac{14}{0}$	$\frac{15}{0}$	$\frac{8}{1}$	$\frac{22}{0}$	$\frac{11}{3}$	$\frac{18}{0}$	$\frac{22}{0}$	$\frac{20}{0}$	$\frac{19}{1}$	$\frac{4}{6}$	$\frac{9}{4}$	$\frac{18}{0}$	$\frac{0}{0}$	$\frac{0}{1}$	$\frac{19}{0}$	$\frac{266}{16}$
	(7)																		2.7	38.0
Universe	$\frac{19}{0}$	$\frac{25}{0}$	$\frac{21}{0}$	$\frac{22}{0}$	$\frac{17}{0}$	$\frac{20}{0}$	$\frac{13}{1}$	$\frac{25}{0}$	$\frac{27}{0}$	$\frac{23}{0}$	$\frac{23}{0}$	$\frac{21}{1}$	$\frac{19}{2}$	$\frac{0}{7}$	$\frac{7}{5}$	$\frac{18}{1}$	$\frac{0}{0}$	$\frac{0}{4}$	$\frac{22}{0}$	$\frac{322}{21}$
	(7)																		3.1	46.0
Hailstones and Halibut Bones	$\frac{11}{0}$	$\frac{14^*}{2}$	$\frac{16}{1}$	$\frac{13}{0}$	$\frac{0^*}{7}$	$\frac{18}{1}$	$\frac{8^*}{4}$	$\frac{14}{0}$	$\frac{15}{2}$	$\frac{17}{0}$	$\frac{15}{0}$	$\frac{18}{0}$	$\frac{18}{3}$	$\frac{0}{7}$	$\frac{2}{6}$	$\frac{7}{2}$	$\frac{0}{0}$	$\frac{0}{1}$	$\frac{16}{0}$	$\frac{202}{36}$
	(7)																		2.3	28.9

EXPLANATION OF TABULATION

A summary of the tabulation is as follows: The left-hand listing identifies the title of the television or film program, whether it was a television program (T) or a film program (F), and the number of evaluators. Columns numbered 1 through 19 refer to the questions in the evaluation instrument. For all programs the top number in the $\frac{0}{0}$ listing is the number of points scored by each program on the question with the point value on the scale multiplied by the number of evaluators ranking the program. The bottom number is the number of DNA--Does Not Apply--responses.

In column 19 an effort was made to show an average score for each program on question 19 which was, "What is your overall evaluation of the lesson?" The average was determined by taking the total points scored by the program on question 19 and dividing the number of evaluators.

The next to the last column reports the total points scored above the line, and the total number of DNA responses below the line. The last column is the average number of points for each program. It was arrived at by dividing the total number of points scored on the questions by the number of evaluators.

The asterisks following some numbers indicate a reservation about the applicability of this item of the form for the specific program being evaluated. For example, the program, "Symmetry," scored 0 points on questions 6, 13, and 14. Question 6 concerned vocabulary level, question 13 concerned personality of the teacher, and question 14 concerned the length of time of the teacher on the screen. In the program, "Symmetry," there was no spoken voice, and a teacher never appeared on camera. It is probably

impossible to develop a general form for structuring judgments which is equally applicable to all kinds of specific programs.

SUMMARY OF PANEL DISCUSSION

Generally, the programs assessed which received the highest scores were highly visual and of good production quality. It was discussed at length, however, whether such qualities necessarily meant that the programs were of high quality as means for learning. For instance, Arithmetic I is more effective as a learning device than some of the other television programs which were evaluated, even though its production quality was below average. The instructor in Arithmetic I appeared before the camera with conventional classroom aids such as the blackboard for the entire length of the program. The simplicity of the presentation, however, did not detract from the rich flow of substantive concepts that were presented.

There was general agreement that the overall technical and production quality of instructional television and film has increased significantly in the last four or five years. Part of the explanation for this improvement can be attributed to the development of organizations for identifying and distributing good instructional television productions. Some of these are the Great Plains Instructional Television Library, the Eastern Educational Network Instructional Service, and the National Center for School and College Television.

A lack of understanding of the uses of instructional television and film sometimes leads to a misunderstanding of quality production. A program or series should include in its statement of objectives information about the educational strategies of its use. For instance, instructional television can be used effectively as a distribution mechanism for instruction presented through another medium, i.e., the conventional classroom.

If it is used specifically in this manner, the output should not be evaluated against other different uses of instructional television. Used as means of distribution, instructional television could be rated high in quality. The potential uses of instructional television and the varied production elements which it includes make it impossible to evaluate television as a narrow-band medium.

Generally, the production values of the film units were judged to be superior to those of the instructional television units. An effort should be made to identify more clearly the "art" of instructional television as distinct from the "art" of film. Once the unique characteristics of instructional television are distinguished from those of film, there might be laid a foundation upon which to build instructional television programs which are uniquely appropriate in education. Two significant characteristics of instructional television can be identified: (1) its use as a distribution device for large bodies of material, e.g., the hardware for distributing materials from one point to another; and (2) its use as a program production device for instructional materials that can be distributed both by television and by other means.

Although instructional television production personnel can learn a great deal from their counterparts in film production, instructional television has the potential for becoming firmly established in the educational system due to the added features of supplementary instructional program materials and in-service teacher training. On the elementary level, a major system for the use of instructional televised units has been developed.

RECOMMENDATIONS

The panel made the following recommendations: A system of evaluation for an instructional television and film program should include separate assessments by (1) panels of audience for which the program is intended, (2) panels of educational specialists, (3) panels of content specialists, (4) panels of production specialists, and (5) panels of media specialists. The judgmental form used should be adapted and differentiated for these and other specific groups of evaluators.

IQ-TV FORM FOR EVALUATING THE INSTRUCTIONAL EFFECTIVENESS
OF FILMS OR TELEVISION PROGRAMS

NOTE: THIS IS THE FORM THAT WAS USED BY THE PANEL. IN THE BLOCK AFTER EACH QUESTION, THE COMMENTS BY THE PANEL ARE NOTED. WHERE THE PANEL RECOMMENDED CHANGES IN THE QUESTION, THE REWORDED QUESTION FOLLOWS.

Name of film or
Name/number of program _____

Title of Series _____

Produced by _____

Distributed by _____

Date of viewing _____

This form has been designed to study the factors and elements in a unit of instructional material which contribute most significantly to its achievement of excellent quality. For the purposes of this evaluation, quality is defined as those factors which produce the desired behavioral changes in the target population.

Please circle the term which represents your best judgment of the degree to which the program satisfies each criterion. Feel free to add any comments which will help to describe the reasons for your evaluation. If you believe the criterion does not apply, please encircle DNA.

I. OBJECTIVES

1. Are the instructional objectives as stated or implied in the lesson clear to the viewer?

Very clear Clear Adequate Unclear Very unclear DNA

What are the objectives? _____

How are they stated? By whom? _____

COMMENTS:

PANEL COMMENTS:

The instructional objectives were not clearly stated in most of the programs reviewed. This led to difficulty in answering all parts of this question.

It was suggested that program objectives would be more explicit if titles of programs clearly reflected the principal objectives of the program or program unit. Statements of objectives could also be included in the beginning of units. Although this procedure may not be artistically appropriate, it would have educational merit.

2. Does the content of the program relate closely to the main objectives, or are there many irrelevancies?

Very
closely Closely Adequately Some
irrelevancies Many
irrelevancies DNA

COMMENTS:

PANEL COMMENTS:

Unless program objectives are clearly stated, it is difficult to judge the relation of the content to the objectives.

II. CONTENT

3. Does the amount of time taken to develop each concept, procedure, or example seem appropriate or inappropriate for the intended audience?

Highly
appropriate Appropriate Acceptable Somewhat
inappropriate Highly
inappropriate DNA

COMMENTS:

PANEL COMMENTS:

The answer to this question could come only from the audience for which the program was intended. This question gives added emphasis to the necessity for the pretesting of instructional materials and retesting during production. Information on effects on learning should be available to panels of judges.

4. Is the content organized and so structured as to facilitate learning?

Very well Well Adequately Poor Very poorly

DNA

COMMENTS:

PANEL COMMENTS:

This is a good question for learning specialists and producers.

5. Is the material based on expert up-to-date professional information?

Contains			Contains		
latest	Very	Adequately	obsolete	Very	
knowledge	up-to-date	up-to-date	information	obsolete	DNA

COMMENTS:

PANEL COMMENTS:

Some of the programs had purely artistic value, e.g., Tobias and Wind in the Willows. In these television programs, professional information is not a factor to be considered.

6. Is the vocabulary level appropriate for the intended audience?

Highly	Very	Appropriate	In-	Very in-	
appropriate	appropriate	level	appropriate	appropriate	DNA

COMMENTS:

PANEL COMMENTS:

This is a good question for learning specialists in particular and needs to be considered in all productions.

III. PRESENTATION OF MATERIAL

7. Does the presentation provide for optimum repetition of the main ideas? (e.g., Summaries of main points from time to time and at end; repetition with variation.)

Optimum	Adequate	Some	Too little	Far too	
repetition	repetition	repetition	or too much	little or	
				far too much	DNA

COMMENTS:

PANEL COMMENTS:

This question could best be answered by members of the target audience in a pretest or production test situation.

8. Does the presentation effectively utilize the visual channel of communication? (e.g., Uses appropriate pictures, film clips, demonstrations, diagrams, etc.)

Highly	Above	Moderately	Below		
effective	average	effective	average	Ineffective	DNA

COMMENTS:

PANEL COMMENTS:

It is difficult to rank productions that use few
visuals but use them effectively.

PANEL RECOMMENDED CHANGE:

8. Does the program effectively use appropriate pictures, film clips, demonstrations, diagrams, and other graphics? (Numbers and kinds of visuals are not as important as the way in which they are used to support the instruction.)

Highly	Above	Moderately	Below		
effective	average	effective	average	Ineffective	DNA

COMMENTS:

9. Is the visual presentation clearly perceivable by use of good lighting, appropriate camera shots, sharpness of details, pointers, suitable backgrounds, etc?

Highly	Clearly		Barely	Unperceiv-	
perceivable	perceivable	Acceptable	perceivable	able	DNA

COMMENTS:

PANEL COMMENTS:

The question is not clear as to whether emphasis should
be placed on a technical and engineering evaluation or on a
production and effects evaluation.

PANEL RECOMMENDED CHANGE:

9. Is the video-photographic presentation clearly perceivable by use of good lighting, appropriate camera shots, sharpness of details, pointers, suitable backgrounds, etc? (This does not require a highly technical or engineering evaluation but rather a judgment as to whether or not the program or film is perceptually clear.)

Highly	Clearly		Barely	Unperceiv-	
perceivable	perceivable	Acceptable	perceivable	able	DNA

COMMENTS:

10. Is the audio intelligible?

High			Low	
intelligi-	Above		intelligi-	
bility	average	Intelligible	average	bility
				DNA

COMMENTS:

PANEL COMMENTS:

Unless a technical evaluation by audio specialists is desired, a five-point scale is unnecessary for this question. For many items of technical quality, the scale should be "go-no go" relative to established technical standards.

PANEL RECOMMENDED CHANGE:

10. Is the audio intelligible?

Satisfactory	Unsatisfactory	DNA
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COMMENTS:

11. Is there an appropriate integration of visual and audio?

Excellent Good Poor Very poor
integration integration integration integration DNA

COMMENTS:

PANEL COMMENTS:

This is a good question for production personnel and learning specialists.

12. Does the presentation give the impression of enthusiasm, sincerity and authenticity?

Very Very
sincere Sincere Satisfactory Insincere insincere DNA

COMMENTS:

PANEL COMMENTS:

This asks for three different judgments.

PANEL RECOMMENDED CHANGE:

12. Does the presentation give the impression of authenticity?

Authentic Lacks authenticity DNA

COMMENTS:

13. Do the personality, voice, and appearance of the teacher or teachers add to or detract from the effectiveness of the presentation?

Adds		Neutral in	Detracts	Detracts	
greatly	Adds somewhat	effects	somewhat	greatly	DNA

COMMENTS:

PANEL COMMENTS:

Many instructional television and film programs are and should be produced without the appearance of a teacher. Also, most instructional films use commentators.

PANEL RECOMMENDED CHANGE:

13. Do the personality and appearance of the teacher or teachers add to or detract from the effectiveness of the presentation?

Adds		Neutral in	Detracts	Detracts	
greatly	Adds somewhat	effects	somewhat	greatly	DNA

COMMENTS:

QUESTION ADDED BY PANEL:

- 13a. Do the characteristics and quality of the instructor's or commentator's voice add to or detract from the effectiveness of the presentation?

Adds		Neutral in	Detracts	Detracts	
greatly	Adds somewhat	effects	somewhat	greatly	DNA

COMMENTS:

14. Does the teacher appear on camera for an appropriate amount of time?

Optimum amount of time	Too much or too little	DNA
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COMMENTS:

PANEL COMMENTS:

If a teacher is a good television teacher, an appropriate amount of time for him to appear on camera might be the total time of the program. The question should include an estimate of the amount of time the instructor appears on the screen.

PANEL RECOMMENDED CHANGE:

14. Does the teacher appear on camera for an appropriate amount of time?

Optimum amount of time	Too much	Too little	Approximate per- centage of time	DNA
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COMMENTS:

IV. LEARNER STIMULATION

15. Are the techniques designed to provide viewer participation successful or unsuccessful?

Highly successful	Moderately successful	Barely successful	Partially unsuccessful	Totally unsuccessful	DNA
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COMMENTS:

PANEL COMMENTS:

Some questions were raised as to what was meant by the term, participation. Interpretation ranged from the programming of responses to the factor of potential involvement. The term should be clarified.

PANEL RECOMMENDED CHANGE:

IV. LEARNER STIMULATION

15. Are the techniques designed to provide viewer participation successful or unsuccessful? (Participation means students using work sheets, devices, and other ways of involving them actively in the instruction.)

Highly	Moderately	Barely	Partially	Totally	
successful	successful	successful	unsuccessful	unsuccessful	DNA

COMMENTS:

16. Does the presentation motivate the student to go beyond the actual lesson by further reading or study?

Very				Very	
high motivation	High	Adequate	Low	low motivation	DNA

COMMENTS:

PANEL COMMENTS:

The phrase, by further reading or study, is limiting.

The results of the motivation should be included in the answer.

PANEL RECOMMENDED CHANGE:

16. Does the presentation motivate the student to do supplementary work and study on the problem? (If so, specify under COMMENTS what the learners might do.)

Very				Very	
high motivation	High	Adequate	Low	low motivation	DNA

COMMENTS:

V. LEARNER ACHIEVEMENT

17. Is any testing incorporated into the presentation to measure the learners' achievement?

Occurs at

appropriate

intervals to

provide feedback

Too much
testing

Too little
testing

No
testing

DNA

COMMENTS:

PANEL COMMENT:

In some instructional television lessons, questions are included in the production. In others, sets of questions are developed to be asked in situations of use. These questions are usually based on supplementary written materials that are made available before the telecast.

PANEL RECOMMENDED CHANGE:

V. LEARNER ACHIEVEMENT

17. Is any testing incorporated into the presentation or presented by the classroom instructor to the students following the telecast to measure the learners' achievement? (Note under COMMENTS how testing is included.)

Appropriate

testing

procedure

Too much
testing

Too little
testing

No
testing

DNA

COMMENTS:

18. Is there a procedure for reporting the knowledge of test results?

Extremely good

feedback procedure. Moderately Adequate Poor No feedback DNA

PANEL COMMENTS:

Most of the instructional television lessons reviewed are used as enrichment or supplementary material by classroom teachers. This question only reflects the presence or lack of a direct reporting procedure incorporated into the television lesson.

PANEL RECOMMENDED CHANGE:

18. Is there a procedure for reporting the knowledge of test results?
(Under COMMENTS, specify what type and to whom reported.)

Yes

No

DNA

COMMENTS:

VI. GENERAL EVALUATION

19. What is your overall evaluation of the lesson?

Outstanding Above average Average Below average Very poor DNA

COMMENTS:

PANEL COMMENTS:

With no exception, the overall evaluation of the unit related directly to the evaluations of the items identified earlier in the form.

PANEL RECOMMENDED CHANGE:

VI. GENERAL EVALUATION

19. What is your overall evaluation of the unit?

	Above		Below		
Outstanding	average	Average	average	Very poor	DNA

COMMENTS:

20. What other criteria are applicable to this lesson? Use these criteria for further evaluation of the unit.

If possible, obtain facts on utilization, i.e., number of schools presently using the lesson or series, how often, etc.

PANEL COMMENTS:

Other criteria for evaluation are these:

1. Conditions of use of the television program or film
2. Effectiveness of film "grammar"
3. Stimulation of active responsive learning

PANEL RECOMMENDED CHANGE:

20. What other criteria are applicable to this unit? Use these criteria for further evaluation of the unit. If information is available, note here facts on utilization, i.e., number of schools presently using the lesson or series, how often, etc.

EVALUATED BY:

NAME _____

TITLE _____

AFFILIATION _____

MAILING ADDRESS _____

PANEL COMMENTS ON FORM AS A BASIS FOR ASSESSMENT

This judgmental form is valuable for determining general assessments of instructional television and film programs. However, highly specialized evaluation forms appropriate for statistical and objective evaluation should be developed. It was agreed that, although an important advance has been made with the development of the Project's form, Evaluating Instructional Effectiveness of Films or Television Programs, much work remains to be done in the field of practical evaluation and dependable measurement in instructional media. Form reliabilities must be established and results of panel evaluation validated against actual learning gains. Furthermore, much more work needs to be done to develop and perfect the procedure for using the panel of judges method for training media people, for developing media teams, and for guiding production personnel.

REVISION OF EVALUATION FORM

The following is the revised form, Evaluating the Instructional Effectiveness of Films or Television Programs, which incorporates the changes recommended by the panel.

Revised 8/12/68

FORM FOR EVALUATING THE INSTRUCTIONAL EFFECTIVENESS
OF FILMS OR TELEVISION PROGRAMS

Name of film or
Name/number of program _____

Title of Series _____

Produced by _____

Distributed by _____

Date of viewing _____

This form has been designed to study the factors and elements in a unit of instructional material which contribute most significantly to its achievement of excellent quality. For the purposes of this evaluation, quality is defined as those factors which produce the desired behavioral changes in the target population.

Please circle the term which represents your best judgment of the degree to which the program satisfies each criterion. Feel free to add any comments which will help to describe the reasons for your evaluation. If you believe the criterion does not apply, please encircle DNA.

I. OBJECTIVES

1. Are the instructional objectives as stated or implied in the lesson clear to the viewer?

Very clear Clear Adequate Unclear Very unclear DNA

What are the objectives? _____

How are they stated? By whom? _____

COMMENTS:

2. Does the content of the program relate closely to the main objectives, or are there many irrelevancies?

Very closely	Closely	Adequately	Some irrelevancies	Many irrelevancies	DNA

COMMENTS :

II. CONTENT

3. Does the amount of time taken to develop each concept, procedure, or example seem appropriate or inappropriate for the intended audience?

Highly appropriate	Appropriate	Acceptable	Somewhat inappropriate	Highly inappropriate	DNA

COMMENTS:

4. Is the content organized and so structured as to facilitate learning?

Very well Well Adequately Poor Very poorly DNA

COMMENTS:

5. Is the material based on expert, up-to-date professional information?

Contains latest knowledge	Very up-to-date	Adequately up-to-date	Contains obsolete information	Very obsolete	DNA
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COMMENTS:

6. Is the vocabulary level appropriate for the intended audience?

Highly appropriate	Very appropriate	Appropriate level	In- appropriate	Very in- appropriate	DNA
-----------------------	---------------------	----------------------	--------------------	-------------------------	-----

COMMENTS:

III. PRESENTATION OF MATERIAL

7. Does the presentation provide for optimum repetition of the main ideas? (e.g., Summaries of main points from time to time and at end; repetition with variation.)

Optimum repetition	Adequate repetition	Some repetition	Too little or too much	Far too little or far too much	DNA
-----------------------	------------------------	--------------------	---------------------------	--------------------------------------	-----

COMMENTS:

8. Does the program effectively use appropriate pictures, film clips, demonstrations, diagrams, and other graphics? (Number and kinds of visuals are not as important as the way in which they are used to support the instruction.)

Highly effective	Above average	Moderately effective	Below average	Ineffective	DNA
---------------------	------------------	-------------------------	------------------	-------------	-----

COMMENTS:

9. Is the video-photographic presentation clearly perceivable by use of good lighting, appropriate camera shots, sharpness of details, pointers, suitable backgrounds, etc.? (This does not require a highly technical or engineering evaluation but rather a judgment as to whether or not the program or film is perceptually clear.)

Highly perceivable	Clearly perceivable	Acceptable	Barely perceivable	Unperceiv- able	DNA
-----------------------	------------------------	------------	-----------------------	--------------------	-----

COMMENTS:

10. Is the audio intelligible?

Satisfactory

Unsatisfactory

DNA

COMMENTS:

11. Is there an appropriate integration of visual and audio?

Excellent

Good

Poor

Very poor

integration

integration

Adequate

integration

integration

DNA

COMMENTS:

12. Does the presentation give the impression of authenticity?

Authentic

Lacks authenticity

DNA

COMMENTS:

13. Do the personality and appearance of the teacher or teachers add to or detract from the effectiveness of the presentation?

Adds

Neutral in

Detracts

Detracts

greatly

Adds somewhat

effects

somewhat

greatly

DNA

COMMENTS:

14. Do the characteristics and quality of the instructor's or commentator's voice add to or detract from the effectiveness of the presentation?

Adds

Neutral in

Detracts

Detracts

greatly

Adds somewhat

effects

somewhat

greatly

DNA

COMMENTS:

15. Does the teacher appear on camera for an appropriate amount of time?

Optimum amount of time	Too much	Too little	Approximate per- centage of time	DNA
---------------------------	----------	------------	-------------------------------------	-----

COMMENTS:

IV. LEARNER STIMULATION

16. Are the techniques designed to provide viewer participation successful or unsuccessful? (Participation means students using work sheets, devices, and other ways of actively involving them in the instruction.)

Highly successful	Moderately successful	Barely successful	Partially unsuccessful	Totally unsuccessful	DNA
----------------------	--------------------------	----------------------	---------------------------	-------------------------	-----

COMMENTS:

17. Does the presentation motivate the student to do supplementary work and study on the problem? (If so, specify under COMMENTS what the learners might do.)

Very high motivation	High	Adequate	Low	Very low motivation	DNA
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COMMENTS:

18. Is any testing incorporated into the presentation or presented by the classroom instructor to the students following the telecast to measure the learners' achievement? (Note under COMMENTS how testing is included.)

Appropriate testing procedure	Too much testing	Too little testing	No testing	DNA
-------------------------------------	---------------------	-----------------------	---------------	-----

COMMENTS:

19. Is there a procedure for reporting the knowledge of test results? (Under COMMENTS, specify what type and to whom reported.)

Yes

No

DNA

COMMENTS:

VI. GENERAL EVALUATION

20. What is your overall evaluation of the unit?

	Above		Below		
Outstanding	average	Average	average	Very poor	DNA

COMMENTS:

21. What other criteria are applicable to this unit? Use these criteria for further evaluation of the unit. If information is available, note here facts on utilization, i.e., number of schools presently using the lesson or series, how often, etc.

EVALUATED BY:

NAME _____

TITLE _____

AFFILIATION _____

MAILING ADDRESS _____